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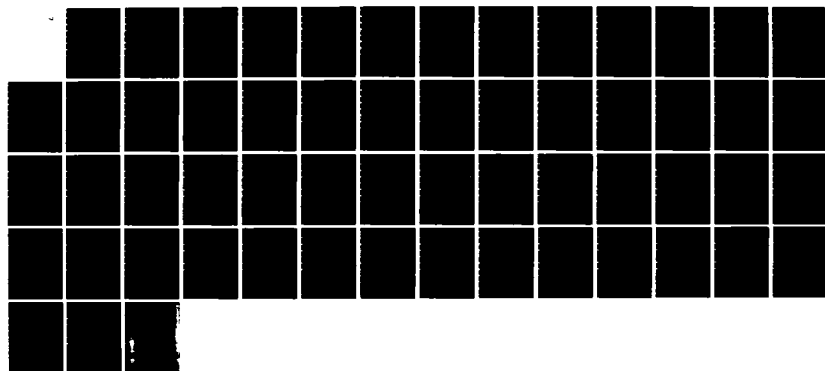
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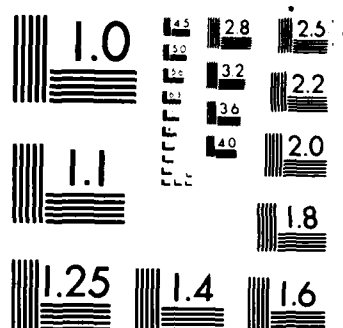
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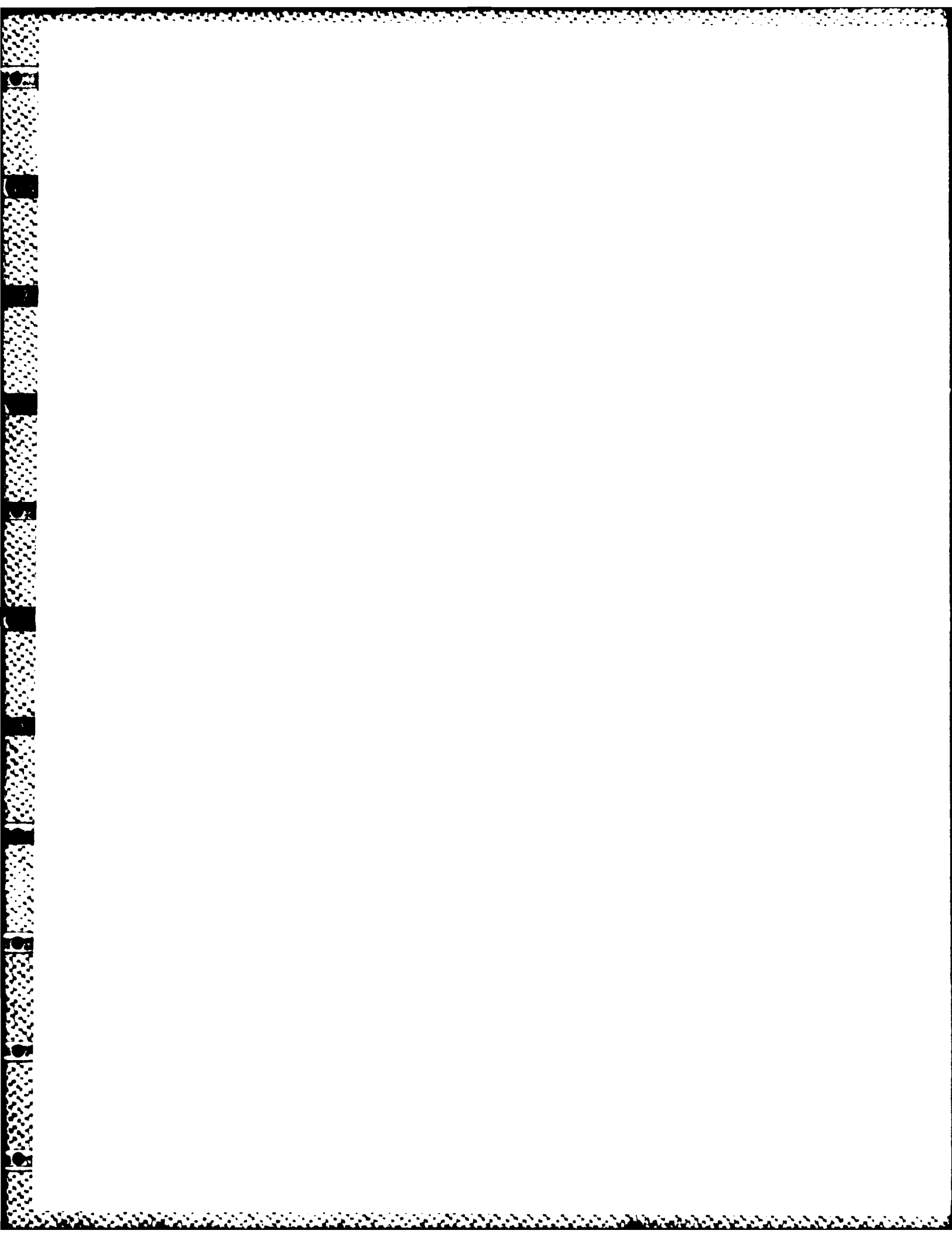
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Sloan Management Review; Fall, 1981.  
January, 1982.
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February, 1982.
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February, 1982.
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March, 1982. Working Paper 1281-82.
- TR-5 Van Maanen, John, & Deborah Kolb. "The Professional Apprentice: Observations on Fieldwork Roles in Two Organizational Settings." In S.B. Bacharach (ed.), Research in Organizational Sociology, Vol. 3., Greenwich, CT: JAI Press, 1983.  
June, 1982; Working Paper 1323-82.
- TR-6 Bailyn, Lotte "Problems and Opportunities for the Maturing Engineer." Appeared as "Career Fulfillment Strategies for Mature Engineers." In Computer Design, October, 1982.  
June 1982.
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June, 1982.
- TR-8 Bailyn, Lotte "Work and Family: Testing the Assumptions." (Forthcoming as portion of a book.)  
August, 1982.
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September, 1982.
- TR-10 Van Maanen, John, & Stephen R. Barley. "Occupational Communities: Culture and Control in Organizations." In B. Staw & L.L. Cummings (eds.) Research in Organization Behavior, Vol. 6, Greenwich, CT: JAI Press, 1983.  
November, 1982.

- TR-11 Bailyn, Lotte, and John T. Lynch. "Engineering as a Life-Long Career: Its Meaning, Its Satisfaction, Its Difficulties." In press: Journal of Occupational Behavior. November, 1982.
- TR-12 Schein, Edgar H. "The Role of the Founder in the Creation of Organizational Culture." Organizational Dynamics, Summer, 1983, 13-28. March, 1983
- TR-13 Schein, Edgar H. "Organizational Culture: A Dynamic Model" March, 1983
- TR-14 Lawrence, Barbara S. "Age Grading: The Implicit Organizational Timetable." April, 1983
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- TR-16 Louis, Meryl R., and Barry Z. Posner. "Socialization Practices, Job Satisfaction and Commitment." Presentation, Western Division, Academy of Management, March, 1983. April, 1983.
- TR-17 Van Maanen, John "Doing New Things in Old Ways." Journal of Higher Education, Fall, 1983. May, 1983.
- TR-18 Barley, Stephen R. "Semiotics and the Study of Occupational and Organizational Cultures." Administrative Science Quarterly, September, 1983. May, 1983.
- TR-19 Schein, Edgar H. "Individuals and Careers." Forthcoming in J. Lorsch (ed.) Handbook of Organizational Behavior, Englewood Cliffs, NJ: Prentice-Hall. May, 1983.
- TR-20 Van Maanen, John "Qualitative Methods Reclaimed." Appeared as "Epilogue" in re-issue of Administrative Science Quarterly (Special Issue on Qualitative Methods, 24, 1979, 1). Sage, Inc., Fall, 1983. September, 1983.
- TR-21 Dyer, W. Gibb, Jr. "Organizational Culture: Analysis and Change." Forthcoming in W. Gibb Dyer, Jr., Strategies for Managing Change, Reading, MA: Addison Wesley, Winter, 1984. September, 1983.
- TR-22 Louis, Meryl R. "Culture Yes; Organization, No!" Presented at the Academy of Management meetings, Dallas Texas, August, 1983 September, 1983.

- TR-23 Schein, Edgar H. "Culture as an Environmental Context for Careers."  
September, 1983.
- TR-24 Schein, Edgar H. "Organizational Culture: or, If Organization  
Development Is Culture Change, Is That Possible and/or Desirable?"  
Invited presentation: Distinguished Speaker in Organization  
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August 16, 1983.  
September, 1983.
- TR-25 Van Maanen, John, and Stephen R. Barley "Cultural Organization:  
Fragments of a Theory." Presented at Academy of Management Annual  
Meeting, Dallas, Texas, August 16, 1983.  
November, 1983.
- TR-26 Schein, Edgar H. "Corporate Culture: What It Is and How to Change It."  
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ORGANIZATIONAL SOCIALIZATION TO INNOVATIVENESS

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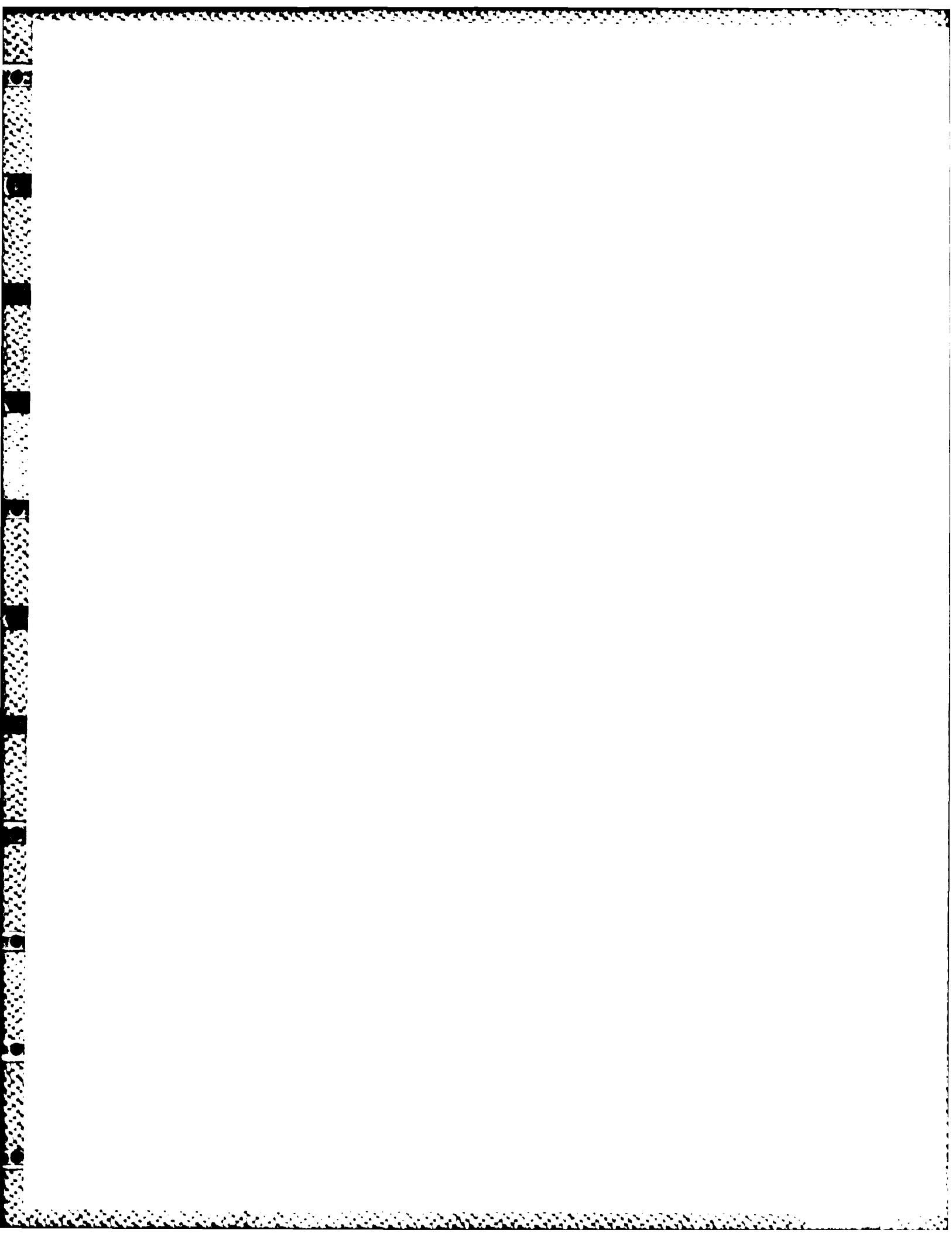
ORGANIZATIONAL SOCIALIZATION TO INNOVATIVENESS

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Abstract

This study tests theoretical associations between socialization practices and outcomes in an innovative organization, LINC -- the main engineering group of a computer firm. Seven pairs of socialization practices are used to classify data gathered during interviews of a representative sample of supervisors. The data reveal that LINC practices those socialization strategies that serve to reinforce its innovative orientation by selecting individuals who will "fit" on the basis of their creativity and individuality. This empirical test confirms most of Van Maanen and Schein's (1978; 1979) theory. And a discussion of situationally specific factors broadens the theory.



## ORGANIZATIONAL SOCIALIZATION TO INNOVATIVENESS

### Introduction

The first contact between a potential employee and an organization often occurs in a recruiting interview. At this time, the individual will be presented with an overview of the organization and possibly, the specifics of a position. Later, after an individual joins (enters) an organization, socialization experiences, both implicit and explicit, expose the newcomer to what goes on in the organization of which he or she is becoming a member. Through these socialization experiences, newcomers learn what behaviors, attitudes, work styles, norms, career paths, etc. are encouraged and considered acceptable in that organization.

The purpose of this study is to test, in an innovative organization, a theory (Van Maanen, 1978; Van Maanen & Schein, 1979) relating seven pairs of socialization practices to their outcomes (individual responses to socialization practices). As will be discussed, different socialization practices elicit different responses from individuals experiencing the socialization. For example, the theory suggests that an innovative organization will practice those socialization strategies eliciting innovative responses.

The socialization agents whose views and practices will be described are individuals on the first rung of a management career ladder (supervisors) at LINC, the primary engineering group of a computer firm. The time frame of concern is entry into the organization.

### Organizational socialization

Organizational socialization is the process<sup>1</sup> by which a newcomer learns to function in an organization and to make sense of the new environment by an internalization of its norms, values, appropriate behaviors, and attitudes (Moore, 1969; Marcson, 1960; Van Maanen, 1976; Schein, 1971; Feldman, 1980). When successful, organizational socialization results in: a) acquisition of the organization's culture through understanding roles and status positions (Brim, 1966); b) "individuals becom[ing] members and continu[ing] as members of a organization" (Van Maanen, 1977: 15); and c) the development of an identity with the organization (Feldman, 1980). Studies have considered socialization of individuals into a variety of occupations.<sup>2</sup> This paper focuses on socialization of computer scientists/engineers in one organization.

Organizational socialization often begins prior to entry into the organization, with the initial contact between an individual and an organization. During the period of pre-entry or anticipatory socialization,<sup>3</sup> the individual begins to develop expectations regarding working in the organization. In addition, behaviors, values, and attitudes of those in the organization may begin to be picked up and integrated by the individual.

With actual entry into the organization, the breaking in period begins. The newcomer searches for meaning in the patterns he or she observes: the clues the individual perceives may be conflicting or hidden (Van Maanen, 1977). Early experiences may challenge or disconfirm a newcomer's assumptions, thereby "unfreezing" the newcomer's old ways (Schein, 1968). After entry, the newcomer may also learn the relevant

career timetables operating in the organization: with this knowledge, progress relative to organizational norms can be measured.

#### Socialization outcomes

Schein (1964) describes three possible outcomes of socialization: rebellion, creative individualism, and conformity. Each reflects the degree of acceptance by the newcomer of an organization's norms and values. One who rebels is totally rejecting the organizations norms and values. At the other extreme is the conformist who accepts all the norms and values of the organization. In between is the response of creative individualism which implies an acceptance only of the organization's pivotal norms and values--those norms and values that are absolutely necessary to the organization. Thus the response of creative individualism allows the newcomer to maintain some of his or her own values and norms and still function in the organization.

These three outcomes can be summarized along a continuum from innovative to non-innovative responses. Clearly, with an outcome of creative individualism, the individual is not constrained and is thus able to create -- to innovate. Rebellion and conformity each tend toward non-innovative responses, because the individual is either accepting the existing means of functioning, or is so busy fighting the system through rebellion and rejection of its norms and values that creativity or innovation becomes an impossible response.

The innovative non-innovative continuum raises some interesting issues. For instance, if, in an organization, outcomes somewhere along this continuum are desired, what can be said about how newcomers might be socialized? Van Maanen and Schein (Van Maanen, 1978; Van Maanen &

Schein, 1979: 7-8) present a theory of "interrelated theoretical propositions about the structure and outcome of organizational socialization processes." They present seven dimensions of socialization strategies. Each dimension reflects a pair of strategies that may be practiced in an organization, with elicited responses falling somewhere along the innovative non-innovative continuum.<sup>4</sup> The seven dimensions or pairs of strategies are:

1. Formal/informal
2. Individual/collective
3. Fixed/variable
4. Tournament/contest
5. Sequential/random
6. Serial/disjunctive
7. Investiture/divestiture

Because no socialization strategy is practiced independently of the others, what emerges for an organization is a patterning of socialization practices along the seven dimensions.<sup>5</sup>

#### Description of socialization dimensions

1. Setting: formal/informal This socialization dimension considers the degree of formality in the learning of new roles. An informal strategy prepares the newcomer for a new role, whereas a formal strategy prepares the newcomer for a new status.

a. In the informal strategy, newcomers are left to their own devices to learn their new roles: it's a sink or swim approach. The outcomes of an informal strategy are situationally determined in that in an organization whose members are predominately innovative (non-innovative), outcomes of the socialization strategy are expected to be innovative (non-innovative).

b. A formal socialization strategy segregates or isolates newcomers from the regular members of the organization in order to provide the newcomers with a specific and common set of experiences. Formal socialization is "most likely to produce custodial [non-innovative]" outcomes (Van Maanen & Schein, 1979: 48).

2. Group context: individual/collective This dimension refers to how newcomers are socialized: alone or in groups.

a. Individual socialization is similar to an apprentice situation: newcomers are socialized singly. Thus, outcomes are not necessarily homogeneous. As is the case in informal socialization, the outcome of individual socialization is situationally determined by the predominant orientation of the socialization agents.

b. Collective socialization results in a consensual definition of the situation, with all newcomers "in the same boat" and sharing the same experiences. The newcomers will react as a group, because they are treated as a group. Collective socialization, because of the consensual definition, will most likely result in non-innovative responses: the group nature of collective socialization is too constraining to allow for innovative responses.

3. Time frames: fixed/variable

This dimension is concerned with the knowledge of timetables for movement through career stages in an organization. As implied by the labels, in a fixed socialization strategy, both timetables and career stages are clear and known. In a variable socialization strategy, the timetables are not clearly set or they are not clearly known.



- a. In the case of fixed socialization, the time to be spent in a stage or the time until the next passage is known. As a consequence of the clarity of movement timetables, little anxiety related to progress is likely to develop. Thus, responses are most likely innovative.
- b. In some instances of variable socialization, the minimum time to be spent in a position may be known, but the actual time to the next passage remains unspecified, thus expectations are often ambiguous, resulting in frustration, anxiety, and confusion for the individual. The tendency to conform as a means of decreasing experienced anxiety suggests that variable socialization will result in non-innovative responses.

4. Tracking: tournament/contest<sup>6</sup>

In this dimension, a career is viewed as a series of competitions, each of which has implications for an individual's future career options. In a tournament socialization process, one mistake turns a person into a loser forever: the person is not likely to progress and may even move down in the organization. Contest socialization avoids making distinctions among individuals. In each competition, assuming similar levels of performance, each individual has the same opportunity for career growth.

- a. A tournament strategy causes individuals to be tracked, on the basis of presumed differences, as either winners or losers. The tracking typically occurs quite early in the individual's tenure with the organization. To avoid failure, conformity to known rules and roles will be the 'safe' approach and responses are likely to be non-innovative.
- b. The contest socialization strategy is accommodating: everyone begins equal and has the same opportunities. Performance is the key

criterion for advancement within the organization. Individuals are encouraged to perform and not to conform. Thus, responses are likely to be innovative.

5. Stages: sequential/random

This socialization dimension is concerned with the degree of knowledge regarding career stages along the path to a specific role in the organization. This role is viewed by the socialization targets as their career goal in that organization.

a. Sequential socialization refers to the existence of discrete, identifiable stages, along the path to a career goal, a specific role. Because knowledge of stages is known, conformity will be expected in order to progress, thereby resulting in non-innovative responses.

b. Random socialization refers to a lack of knowledge of clearly discernible and distinct stages leading to a career goal. There may be no consensus on what the target roles are, let alone how to reach those roles. Because individuals are not concerned with being in step or being on the path to some defined career goal, they are able to focus on their work and responses to a random strategy should be innovative.

6. Role models: serial/disjunctive

The existence or lack of existence of role models is key to this dimension. Role models serve to perpetuate the current operating practices in an organization.

a. Serial socialization requires the existence of role models in prescribed roles, who groom their successors who are then "following [in] the footsteps of immediate or recent predecessors" in a role (Van Maanen

& Schein, 1979: 61). The organization will tend to be stable, thereby risking stagnation. Responses are expected to be non-innovative.

b. Disjunctive socialization incorporates the idea that individuals will learn by ordeal: by being tested and exposed to the "reality" of working. The "old way" of doing things is de-emphasized. As a result of the lack of constraints on individuals, new perspectives are sought and encouraged, and responses are likely to be innovative.

#### 7. Identity: investiture/divestiture

This strategy serves to "confirm or disconfirm the entering identity" (Van Maanen & Schein, 1979: 64). An organization's socialization practice along the investiture/divestiture dimension serves, by accepting or changing individual identity, to reinforce the other socialization practices. Thus, this dimension may be viewed as an indicator or overview of the other socialization practices for an organization.

a. An investiture strategy allows an individual to maintain his or her identity. Time is provided for the newcomer to adjust. Each person is important, individual approaches are tolerated, and new ideas are considered. As a result of the emphasis on maintaining individual identity and, due to the lack of constraints on individuals, responses are likely to be innovative.

b. A divestiture strategy changes an individual's identity in order to develop similarities among employees. Due to the high level of similarity, responses are likely to be non-innovative.

For the seven socialization strategies described here, the links between socialization practices and outcomes are summarized in the table below.

RESPONSE TO SOCIALIZATION PRACTICE

<u>Socialization practice</u>	<u>Response</u>
Formal	non-innovative
Informal	situational
Collective	non-innovative
Individual	situational
Fixed	situational
Variable	non-innovative
Tournament	non-innovative
Contest	innovative
Sequential	non-innovative
Random	innovative
Serial	non-innovative
Disjunctive	innovative
Investiture	innovative
Divestiture	non-innovative

The socialization practices described here will be referred to later as data are used to test associations between outcomes to socialization practices. But first, the choice of an organization and methods of data collection will be discussed.

Choice of an organization

To test the socialization theory associating socialization practices with outcomes (Van Maanen, 1978; Van Maanen & Schein, 1979), one must consider organizational attributes which can affect the forms of socialization practiced within that organization. These socialization practices may be chosen explicitly or they may arise naturally, reflecting the norms and values of the dominant members of the organization.

For an empirical test of Van Maanen and Schein's theory, one must know first if an organization is innovative or non-innovative in its orientation, and, second be able to assess an organization's actual socialization practices. If the theory is valid, an organization's socialization practices will, through their outcomes, work to reinforce the orientation of the organization.

For example, in an organization in which there are few changes over time, new ideas are frowned upon, and members are expected to conform to existing practices, the socialization practices should reflect the non-innovative orientation of members of the organization. Formal, collective, variable, tournament, sequential, serial, and divestiture socialization practices, which tend to reflect the non-innovative nature of the organization, are most likely to be the actual socialization strategies practiced. A similar argument can be made for a highly innovative organization.

The socialization practices expected in an innovative organization are informal, individual, fixed, contest, random, disjunctive, and investiture. To test for the expected outcomes in an innovative organization, LINC was chosen.

Description of LINC

LINC is the primary engineering organization of a computer firm and operates in a high technology, high growth industry. The firm of which LINC is a part was founded about 30 years ago and has experienced growth of over 20% annually for the past six years (1976-1982). LINC uses a matrix structure and a dual ladder of career paths (management/technical).

In an internal company document, based on a presentation by LINC employees to the IEEE (Institute of Electronic and Electrical Engineering), LINC's climate is described as innovative. In particular, differences in management style, a norm against standardization, and taking responsibility and initiative are noted as important features of LINC's climate which function to reinforce the orientations of its employees and thereby reinforce the innovative nature of the organization as a whole. Jacobson (1977) found that TMR,<sup>7</sup> a recognized leader in its technical field, is a successful company, and that TMR emphasizes high quality work. These two examples, one internal and the other based on an outside observer's assessment, both refer to LINC as an organization in which innovation by employees is critical. LINC is in an industry well known for its rapidly changing technologies and innovations. LINC's mode of operating is consistent with its industry's, i.e. in an innovative industry, LINC is an organization which prides itself on its innovative climate.

### Measurement of socialization practices

To test for theorized associations between socialization practices in an organization and their outcomes, it is necessary to measure the socialization practices empirically. These practices can be assessed either from the perspective of socialization agents or socialization targets. In either case, biases exist. Because this research is concerned with the intent of socialization as opposed to its results, agents are the more appropriate group to query.<sup>8</sup>

For a number of reasons, it seemed wise to begin collecting information from individuals on the managerial ladder. First, as a group, those on the managerial ladder are more likely to be involved in recruiting new employees. Second, this group is more likely to have an espoused theory of enacting the socialization: knowing what newcomers need to learn about LINC in order to work in the organization.<sup>9</sup> And third, because the managerial ladder may tend to reflect the views of those at the top of the organization, managers -- who are likely to be more closely linked to the top of the organization and its policies than non-managers -- may be aware of the "LINC theory" of socialization, the company line.

### Supervisors as key socialization agents

The following assumptions led to the choice of supervisors (first rung of the managerial ladder) as the most appropriate socialization agents with whom to begin this research.

1. As part of the management structure, supervisors will have theories, either LINC's or their own, of how to socialize newcomers and people moving up the ladders.

2. Supervisors are closest to the level of the engineers and as such are likely to be able to provide a good sense of what procedures and policies exist and how information on procedures and levels within LINC is transferred to these new and advancing engineers and technical people.
3. The matrix structure provides an employee with two individuals, each of whom is responsible for different areas: a supervisor who is responsible for administrative details, including evaluations of performance, career management, and salary determinations, and a project leader who oversees the individual's technical work.

Therefore, supervisors are the initial socialization agents: they present LINC to potential recruits during interviews when LINC, the work group, and possibly a particular position are described, and they are responsible for introducing newcomers to the organization at the time of entry.

Supervisors are very likely to have been project leaders in their previous role, either Senior Engineers or Principal Engineers. Hence, at LINC, supervisors are in a unique position as socialization agents: they are most responsible for introducing newcomers to both administrative and technical aspects of the organization.

This view of supervisors as the most appropriate choice for studying socialization agent practices is supported by Jacobson's (1977) study of TMR (the firm of which LINC is a part). He writes:

The supervisor is perhaps the most central figure in the new hire's organizational life. The supervisor sets the climate of the work group, allocates work to the employees, evaluates their success, and determines in large measure promotion and salary increase. (p.31)

Socialization agents, in this case LINC supervisors, will have both espoused and actual theories of socialization. In this study, I am asking supervisors to describe how they bring newcomers into the organization.



This enables an assessment of espoused practices. To assess actual practices would require a comparison of supervisor views with newcomers' perceptions of the socialization experiences. Although such an assessment is beyond the scope of this paper, comparing a limited set of newcomer perceptions (Jacobson, 1977) with the findings in this study shows many similarities.

#### Method for measurement

Having chosen to assess agent views of socialization practices, a method for assessment is required. In this research, structured interviewing socialization agents is the method employed. Open ended questions in face-to-face interviews provide the data in which LINC supervisors, in their roles as socialization agents, introduce and communicate to newcomers LINC's mode of operating. Supervisors were asked to describe their presentation of LINC to potential recruits and organizational newcomers. A variety of topics covering the period from the initial recruiting interviews, through first and subsequent job assignments, performance and salary reviews, and into later career planning and movement issues, allowed for an assessment of views of socialization across time.

#### Data Collection

All interviews were confidential, lasting an average of one hour, and included supervisors at five geographically distinct LINC facilities. With one exception\*, all interviews were conducted in the

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\*This interview was conducted in the facility's cafeteria.

supervisor's office (n=5) or a nearby conference room (n=7) chosen by the supervisor. All interviews were conducted and analyzed by the author.

#### Selection of subjects

A representative sample of supervisors with at least one year of supervisory experience was selected from an anonymous list of about 200 LINC supervisors. The entire group of supervisors was differentiated by age (21-30, 31-40, 41-50). Within each age group, individuals were chosen to be representative of the spread in each age group on the basis of education (no degree, associate, Bachelors, Masters), years at LINC, years as a supervisor, gender, hardware/software orientation, and those who came to LINC as their first job. This resulted in a sample of 15 people, of whom thirteen were interviewed.

#### Socialization at LINC

Classification of the data using the seven pairs of socialization practices described earlier (Van Maanen, 1978; Van Maanen & Schein, 1979; Rosenbaum, 1970) reflects inferences made by the author from interviews with thirteen LINC supervisors. The nature of the data collection, interviews consisting of open ended questions, is reflected in the presentation of the findings. Each supervisor discussed what he or she believed to be important, hence, data depicting a variety of views on a particular issue do not necessarily exist. In fact, the lack of opposing data can be taken as support for a fairly homogeneous view held by LINC supervisors.

For each dimension, an expected socialization practice is presented, followed by data which note the number of supervisors who

discuss the topic as well the number who support the statement. Representative quotes and/or summaries are presented for each topic. The data are then classified and an assessment made.

1. Setting: formal/informal

LINC is expected to practice an informal socialization strategy which will result in innovative outcomes.

Data: The climate is unstructured: sink or swim, you are on your own

Discussed by: 12  
Supported by: 12

"LINC is known for allowing people to do their own thing ... It's a very unstructured company.' "You are supposed to ferret out your own things."

"I think ... that it's almost like ... a sink or swim situation."

Learning the ropes "by osmosis."<sup>10</sup>

Discussed by: 12  
Supported by: 10, two supervisors tell newcomers about levels and career options.

Both newcomers and current LINC employees find out about levels and career options "by osmosis" (n=5) or if they ask someone (n=5). This information is not explicitly provided to newcomers.

There are no formal guidelines for working

Discussed by: 3  
Supported by: 3

It is what gets done, not how or when.

Classification of data: The "sink or swim" approach of an informal strategy is an integral part of LINC's unstructured, hands off policy. Newcomers are expected to pick things up on their own. In some cases, an "official mentor"<sup>11</sup> is assigned to help with the technical work and to answer more general questions about the work group and about LINC. The tangible nature of the work may overcome some of the anxiety typical of informal socialization.

As was noted earlier, although an informal strategy tends toward either innovative or non-innovative outcomes, in an innovative organization such as LINC, outcomes will be innovative.

Conclusion: LINC has been determined to practice informal socialization.

2. Group context: individual/collective

LINC is expected to practice an individual socialization strategy which will result in innovative outcomes.

Data: LINC views individuals as important.

Discussed by: 9

Supported by: 9

LINC's culture gives individuals responsibility and freedom. "I describe the organization as an organization where individuals have a lot of say. Where individuals are expected to take initiative ..."

Guidance and training are provided on an individual basis.

Discussed by: 11

Supported by: 11

The "mentor" assignment of a more senior person to a newcomer is made to guide the newcomer through the technical work.

In some cases, "handholding" by the senior person is required, especially for those straight out of school.

Discussed by: 7

Supported by: 7

Training is set up as required, on an individual basis, to fill in gaps in knowledge and experience.

Classification of data: at present, newcomers join LINC singly -- they are hired by and into a specific work group. Thus, the socialization is necessarily individual. LINC's use of "official mentors" who act as guide to learning about working at LINC is similar to an apprentice situation. In this organization, individuals are very important: no general prescriptions exist.

Conclusion: LINC has been determined to practice individual socialization.

3. Time frames: fixed/variable

LINC is expected to practice a fixed socialization strategy which will result in innovative outcomes.

Data: There are no organizationally set timetables for career growth.

Discussed by: 8  
Supported by: 8

"It's ... your decision as to what you want to do and where you want to go. We'll help you get there, but we don't have any grand scheme laid out."

"The company is growing so fast ... it probably doesn't matter" what career planning exists, or what information is available to individuals.

There are great variations in project time frames across groups

Discussed by: 11  
Supported by: 11

Because time frames for projects vary from three months to five years, it becomes difficult to determine manpower needs for any given time.

No consensus of the use of job descriptions

Discussed by: 8  
Supported by: 8

LINC job descriptions of the stages (levels) are generally not used. Instead, many groups have developed their own descriptions to meet the group's requirements (n=5) or use no job descriptions (n=1). For two supervisors it is unclear whose job descriptions are used, those of the group or LINC's. Because individuals may move through groups as they progress in their careers, this lack of consensus affects the organization-wide clarity of timetables and stages.

Discussed by: 12  
Supported by: 10, two supervisors tell their subordinates

The variable nature of the socialization is reinforced through the learning of career options and stages primarily "by osmosis."

Classification of data: LINC's high growth rate has resulted in a constant need for additional people at all levels and great variance in project time frames, thereby tending to disallow the practice of a fixed socialization strategy. Although fixed timetables for movement are not possible, the majority of supervisors do schedule evaluations (salary and performance) in accord with the frequency requested by LINC.<sup>12</sup> The regularity of evaluations may provide LINC employees with some sense of structure. For, even if movement timetables do not exist, salaries will be reviewed, and most likely increased, on an annual basis.

Conclusion: As this dimension refers primarily to career movement timetables, LINC has been determined not to practice fixed socialization.

4. Tracking: tournament/contest

LINC is expected to practice a contest socialization strategy which will result in innovative outcomes.

Data: Individuality is encouraged, labeling is not

Discussed by: 11  
Supported by: 11

Because individuals are included in the making of job assignments, there is no one individual who is judging or tracking omnipotently.

Discussed by: 10  
Supported by: 10

LINC provides individuals with responsibility and freedom. Individuals must push themselves.

Finding one's spot

Discussed by: 8  
Supported by: 8

The option of mobility within LINC functions as a means of allowing each individual to find his or her own slot -- no one is viewed as a loser, it is just that he or she is in the wrong spot (n=8). It is acceptable to shift between the two ladders (n=3).

Performance is key

Discussed by: 12

Supported by: 12

It is the work that counts and not how or when it gets done.

If a person is not willing to "be a performer," it will not go over well. Performance creates opportunities.

LINC has a policy of paying for performance: "One thing that LINC really does, I think, is pay ... and promote on performance."  
"Individual contributors" count -- one is promoted for doing well.  
"People get what they earn."

Success and failure

Discussed by: 3

Supported by: 3

"They allow you to be creative, to be successful and they go out of their way to help you [to] be successful."

Good people do not flounder, even in LINC's "sink or swim" environment.

It is assumed that the initial selection is so successful that a person could never fail. Consider a quote made by a GEM employee on career employment at GEM. "When you hire someone ... it's really a major commitment ... You're pretty damn careful about what you're going to do because we look at it as a long term issue" (Dyer, 1982: 16). Dyer adds that "rather than being fired, prodigal sons are given the opportunity to find another job in a different part of the company" (p.16).

"I think we have a lot of people fail and it's our fault" -- more supervision might help. There is no further elaboration on this point.

Classification of data: LINC practices a socialization strategy which reflects the emphasis placed on individuality. At LINC, each person is considered unique. No form of tracking could incorporate this view: tracking would lump people together, thereby negating the importance of the individual. As is typical of contest socialization, LINC uses performance as the key criterion for advancement within the organization; individuals are expected to perform rather than conform.

The quality of the work is most important; how the work gets done, both in terms of hours worked and methods used is of far less importance. With LINC's emphasis on selection of "good" people, it is expected that losers will not be hired. In fact, an individual who does poorly is assumed to be in an inappropriate spot -- mobility within LINC allows for finding the right spot for each person.

Conclusion: LINC has been determined to practice contest socialization. The observation that "a lot of people fail," made by only one supervisor, is insufficient to support a practice of tournament socialization at LINC.

5. Stages: sequential/random

LINC is expected to practice a random socialization strategy which will result in innovative outcomes.

Data: Career planning issues.

Discussed by: 3  
Supported by: 3

"We are not hiring for a particular position ... the type of person we want to hire is a versatile person." An individual is not slotted for a given spot and may be pushed into an area not sought by that person because the staffing needs of the group take precedence.

LINC encourages individual choice: "we don't have any grand scheme laid out [that says] this year you'll do this, next year you'll do that."

"The company is growing so fast ... that it probably doesn't matter ... [whether you] become a principal engineer or [an] engineering supervisor ... we have a need for just about everybody." Also, with rapid growth, career stages will necessarily change as the organization structure is forced to accommodate to the growth.

Classification of data: LINC is an organization that prides itself on selecting newcomers for their individuality and creativity. A result of the emphasis on individuality is that career goals (target roles) are not commonly shared. The lack of consensus on career goals is reinforced by



the loose nature of the transmittal of career/movement information.

Thus, LINC practices a form of socialization in which individuals focus more on their work than on career planning issues.

Conclusion: LINC has been determined to practice a random socialization strategy.

6. Role models: serial/disjunctive

LINC is expected to practice a disjunctive socialization strategy which will result in innovative outcomes.

Data: Lack of norms and rapid growth at LINC.

Discussed by: 9  
Supported by: 9

The group is growing now (n=5). Growth is projected (n=2). In two groups, no growth is planned.

Discussed by: 8  
Supported by: 8

No norms exist for the dissemination of career option and level information. Each group does it differently. In fact, many groups (n=5) develop their own job descriptions.

Discussed by: 12  
Supported by: 10, two supervisors tell their subordinates

Much of the information regarding levels within LINC is learned "by osmosis" and not from specific role models or predecessors, although some individuals will look around to see who is doing what, and at what level that person is.

Individuals are responsible for their own career planning and progress.

Discussed by: 12  
Supported by: 12

Individuals must be responsible for themselves, they must work toward realizing their own goals. Individuals' interests are incorporated into the making of job assignments.

"It's your decision as to what you want to do and where you want to go."

Confusion and gaps in the structure.

Discussed by: 4

Supported by: 4

The matrix structure has gaps and vagueness and LINC has developed more rules to govern work.

One supervisor related a story of someone who had reported to work on his first day and the person who had hired him was no longer at LINC. The newcomer felt totally abandoned. This happens, "though maybe not as often as it used to happen ... people have been, tend to be, very shocked, because they are just sort of left" (abandoned).

Role models

Although there is no explicit evidence for the existence of role models at LINC, "mentors," whose primary role is to provide technical guidance might be viewed as role models (see 2. collective/individual: discussed by eleven supervisors).

Classification of data: A lack of internal role models, typical of disjunctive socialization, is reflected in LINC's rapid growth which effectively forces people's careers to move quickly and in a variety of directions. No clear norms for movement can exist and the socialization agents are likely to be relative newcomers to the organization, with insufficient time to have learned from role models, should they exist. One consequence is that the organization will be in a state of transition with too few role models to socialize the newcomers. In addition to the lack of role models, LINC, as a result of its emphasis on individuality, does not take any initiative for career planning. Individuals must learn what is necessary and look after themselves.

Conclusion: LINC has been determined to practice a disjunctive socialization strategy.

7. Identity: investiture/divestiture

LINC is expected to practice an investiture socialization strategy which will result in innovative outcomes.

Data: At LINC, screening for an initial fit of personality is very important: The type of individual who will function well at LINC is actively sought.

Discussed by: 11  
Supported by: 11

Fit into LINC's environment is actively sought and encouraged. "Fit" refers to selection on the basis of individuality and creativity. The assumption is that once it is determined that a person "fits," everything else will fall into place and the newcomer will become an able member of the organization.

LINC attracts similar types of people. "I suspect that a lot of people who come into LINC sort of already are part of the culture. They say 'Yeah, those people are like me'." One "can always tell a LINC person on an airplane" -- LINC's selection yields similar types.

"We receive a lot of people that have had problems in other companies, because the companies have been so structured."

LINC is very concerned with its employees.

Discussed by: 9  
Supported by: 9

Individuals should not be constrained. They should be treated fairly and equally.

Discussed by: 3  
Supported by: 3

Feedback and communication up and down are encouraged. Two supervisors noted that each individual has a say in what happens.

Discussed by: 7  
Supported by: 7

The existence of the dual ladder at LINC allows an individual to choose a path that, in theory, is consistent with that individual's desires, values, skills, etc.

Individuality is encouraged and expected.

Discussed by: 10  
Supported by: 10

The supervisors view their role as supportive or as helping to develop existing skills and abilities and not as that of molding the newcomer. Individual choice is encouraged.

That the company for which one works will be special in some way for each individual recognizes and accepts differences among individuals.

Individuals are responsible for themselves

Discussed by: 9  
Supported by: 9

Individuals have freedom and flexibility to pursue their goals. "You are supposed to ferret out your own things" and manage your own time. "I think basically that people had -- have -- a lot of freedom:" the guidelines are fairly loose and the environment encourages creativity.

Mobility and low attrition

Discussed by: 12  
Supported by: 12

As a result of the mobility within LINC (n=5), attrition to outside the company is low (n=11).

There is time to acclimate to LINC

Discussed by: 8  
Supported by: 8

Newcomers are placed on smaller projects, not "on the critical path, under a lot a pressure." "There is a certain period of time that people need to become acclimated to LINC."

Creativity at LINC

Discussed by: 1  
Supported by: 1

"All in all, I think LINC is a good place to work if you want to be creative." "They allow you to be creative, to be successful and they go out of their way to help you [to] be successful."

Classification of data: LINC practices a socialization strategy in which individuals are not molded into a common form ("clones"). LINC's concern for its employees and for the maintenance of their individuality is typical of an investiture strategy. By its practice, LINC reinforces the

importance of fit: both in terms of selection and the criterion for selection (individuality).

Conclusion: LINC has been determined to practice an investiture socialization strategy.

To summarize, six of the seven associations have been found. With one exception, LINC's socialization practices, as determined by the data, are as expected. The next section considers implications of this finding.

### Analysis

This research set out to validate a theory by testing associations between socialization practices and predetermined outcomes in an innovative organization. With one exception, as depicted in the table below, the associations suggested by Van Maanen and Schein have been found. The one exception, in the fixed/variable dimension, can be explained in terms of situational or organizationally specific factors. In fact, two of the six other associations are also situationally determined in that responses to both informal and individual socialization strategies are expected to be extreme and, in the case of an innovative organization such as LINC, we expect the innovative response. An innovative organization is most likely to socialize for innovative responses, because its members will tend to have innovative orientations and, as socialization agents, their orientations will be transmitted to the newcomers.

### Summary table of LINC's socialization practices

<u>Dimension</u>	<u>Theorized Practice at LINC</u>	<u>Actual Practice</u>
formal/informal	informal	informal
individual/collective	individual	individual
variable/fixed	fixed	*variable*
tournament/contest	contest	contest
random/sequential	random	random
serial/disjunctive	disjunctive	disjunctive
investiture/divestiture	investiture	investiture

### Variable socialization: What happens to the theory?

It is possible, under some conditions, for variable socialization to result in innovative responses. An innovative response to a variable

socialization practice can be due to two factors. First, for an organization in a rapid growth industry it is difficult, if not impossible, to adhere to organizationally set timetables. And second, for a highly technical organization whose technologies are rapidly changing, career moves will necessarily reflect the technological changes because technical obsolescence may occur quickly. Elaborating on these two factors requires a return to the descriptions of each strategy fixed and variable.

According to the theory, in a fixed socialization strategy an individual is considered deviant if "off schedule." At LINC, the norms for movement are dictated in part by the larger environment: what might be considered deviant in another environment may well be normal for LINC's high growth and high technology environment. LINC's growth rate, over 20% annually for the past six years (1976-1982), allows for rapid career progress and makes it difficult to maintain organizationally set timetables for movement if they were to exist. In addition, the dominance of technical work results in tangible measures of individual achievement. Each of these reasons tends to negate a need for an organizationally imposed structure. Thus, because the rapid growth and evolving technology force frequent moves, the practice of a fixed socialization strategy is not possible at LINC.

Although LINC's environment forces the practice of variable socialization, the consequent ambiguity affects everyone and the anxiety and frustration typical of variable socialization need not be experienced. Therefore, LINC's practice of variable socialization reflects the organization's situation -- its environment -- and it need not result in non-innovative responses typical of variable socialization.

The concept of fit

By considering the seven-dimensional pattern of socialization practices that can be used to characterize an organization and to distinguish among organizations, one might ask how such a pattern arises.<sup>13</sup> This study has shown that the innovative nature of an organization affects socialization practices, but is there something more? Is there a feature of an organization's culture or climate that links together the seven socialization strategies practiced? Considering LINC from this perspective, the theme of "fit" stands out as critical in forming the basis of the socialization practices at LINC.

Fit refers to the toughness of the selection process, during which individuals are sought whose personalities mesh with attributes of those already in the organization.<sup>14</sup> (Screening for technical ability is also a factor in selection, but this is a more objective criterion than is fit.) Fit assumes that by hiring the "right" people at the start, you will not have problems later. This aspect of fit is found in LINC's practice of investiture socialization which allows individuals who are selected for their individuality to be left alone to do "their stuff." People who fit at LINC are those with creativity and individuality, both of which are required in an industry with a rapidly changing technology.<sup>15</sup> LINC employees are expected to be proactive--to take responsibility for themselves, for their work, and to push their own ideas. Even in LINC's sink or swim environment, people do not sink. If an individual is having difficulty, it is attributed to the situation (the work group) rather than to the individual or to LINC's having selected an individual who does not fit.<sup>16</sup>

A few quotes are included as examples of the theme of fit at LINC.



"The environment decides a lot of our applicants ... we try to show them our environment. Some people don't fit. And one of the things we want is to develop a sense of whether they're going to fit or not. Whether they're going to be comfortable with the way our group works, and just the general atmosphere." A good person is hired for future potential, even if the person is overqualified for the present opening.

"... all that is sort of a preselection kind of thing, trying to get people to decide whether they want to be in this group, so that they don't find out after they take the job."

"All in all, I think LINC is a good place to work if you want to be creative."

"Individuals are expected to make contributions as individuals, they're expected to take initiative and ... they're not expected to take the direction of management at face value."

#### Fit and organizational culture

In his analysis of GEM's organizational culture, Dyer (1982) presents three underlying assumptions of the GEM culture, two of which are relevant to this analysis of LINC.<sup>17</sup> GEM's cultural assumptions are related to LINC's theme of fit: GEM considers itself as one family and believes that people are capable of governing themselves. From these assumptions follow practices and expectations of behavior and attitudes.

Considering GEM as a family has a number of implications. Among these are that ties to one another and to the organization will be strong. For example, once hired, an individual becomes a member of the GEM family and is virtually ensured "career employment" and "decisions affecting the GEM family must be made in concert with others to avoid offending other family members" (Dyer, 1982: 24). Second, similarities are emphasized, status differences are minimized, both of which serve to unify the organization: "status differences interfere with establishing a feeling of community" (Dyer, 1982: 18). Selection on the basis of fit also emphasizes similarity of personalities. And, according to Holland

(1973), in an organization in which there are similar personalities, individuals will tend to respond to problems in similar ways. Thus, the theme of fit and the assumption that GEM is one family both serve to reinforce similarities and consequently unity within the organization, be it LINC or the whole of GEM.

The assumption that people are capable of governing themselves reflects the belief that "humans are assumed to be innately good and are seen as being proactive, enterprising, and willing to take responsibility for their own actions ... people have the ability to govern themselves" (Dyer, 1982: 27). By allowing and encouraging self-government, newcomers are left alone. It is believed that creativity and initiative will be encouraged by not dictating specific rules that might result in additional red tape, a loss of freedom, or GEM's becoming more like a big company. This assumption too reflects the theme of fit (creativity and individuality). Thus, Dyer's findings of GEM's cultural assumptions support the theme of fit at the firm (GEM) level and consequently the selection of LINC as an innovative organization.

#### Fit and socialization practices

Clearly, LINC's socialization practices reflect the concept of fit as an operating theme at LINC. Fit supports the innovative nature of the work at LINC: individuality arises from the selection process, it is not a result of the socialization. The socialization strategies practiced are those which both result in innovative outcomes and least constrain individuals, thereby reinforcing the innovative nature of members of the organization and the selection criteria. Examples of fit as an underlying theme of the socialization practices at LINC are included below.

<u>Example</u>	<u>Socialization Practice</u>
Selection of good people; those who can do the work and whose personalities match with those of existing LINC employees	investiture
No constraints are needed when newcomers are chosen on the basis of fit	informal & variable
The dual ladder option allows individuals to find their own niche within LINC	random & individual
There are no pre-set career stages that would shape employees	random
Mobility within LINC allows each individual to find an appropriate spot	individual, investiture, & contest

To summarize, six of the seven theorized associations between socialization practices and individual responses have been confirmed. The one disconfirmed association, in the fixed/variable dimension, is shown to be determined by situational factors. Thus, on the whole, the theory presented by Van Maanen and Schein holds through this empirical test: an innovative organization will practice socialization strategies that support the organization's innovative nature. In addition, the patterning of socialization strategies may reflect something more: in this case the theme of fit, which is itself a reflection of the organization's cultural assumptions.

By testing associations between socialization practices and outcomes in an innovative organization, most of Van Maanen and Schein's theory has been confirmed. In addition, the theory has been broadened by

a discussion of some situationally specific factors which result in surprises to the theory. In particular, an innovative organization in a high growth and high technology environment need not prescribe fixed timetables for movement. The lack of fixed timetables does not necessarily result in the anxiety and consequent non-innovative responses theorized by Van Maanen and Schein. This theory may continue to be tested in other types of organizations with other exceptions to be found. The theory can be further enhanced through validation such as that demonstrated in this paper.

This analysis has presented empirical data on agent socialization practices as described by LINC supervisors. What remain as empirical questions are, first, whether or not individuals on the technical ladder and those at other levels on the management ladder hold the same views as have been described in this paper. And second, as LINC continues its dramatic growth, will the organization be able to maintain its selection process on the basis of fit, thereby achieving the desired homogeneity of individualistic and creative employees?

#### Conclusion

At LINC, the theme of "fit" serves as a supportive structure for both the socialization practices and the innovative nature of individuals in the organization. Fit asks that individuals be selected using the criterion of individuality. That selection and its criterion results in individuals whose innovative and individualistic qualities are supported by the organization's socialization practices. This differs from the case in which individuals are socialized to be innovative. In effect,

LINC's socialization practices are "hands off," allowing newcomers to use the quality for which they were selected -- their individuality. Therefore, LINC's socialization practices aid in reinforcing the selection feature of "fit" as well as the overall innovative nature of the organization.

Notes

1. The process of organizational socialization is continuous: Van Maanen (1976: 68) describes the process as a "matching and melding of individual and organizational pursuits" and Feldman (1980) refers to the need for continuous acquisition of new behaviors and attitudes as ongoing socialization. Socialization can be formal or informal, its results intended or unintended (LeVine, 1969).

2. Marquis (1965) studied engineering and science students and Miller & Wager (1971) studied scientists and engineers in an aerospace company, and Becker & Carper (1956A; 1956B) describe the occupational choice and socialization for three groups of graduate students: physiologists, engineers, and philosophers.

3. The term "anticipatory socialization," originated by Merton (1957), is described by Van Maanen & Schein (1977: 59) as "the degree to which an individual is prepared, prior to entry, for an occupational or organizational position."

4. Each pair of socialization strategies represents a continuum. The practice of a particular strategy refers to a practice which is nearer to one end of the continuum than to the other. In fact, on a particular dimension, an organization's socialization practice may fall directly in the middle of the continuum, implying a neutral or ambiguous practice.

5. The pattern will reflect the dominant response among the seven strategies practiced in an organization. Responses range from innovative to non-innovative.

6. This dimension is based on work by Rosenbaum (1979) on mobility patterns in organizations. The theory for this dimension is fairly vague, a function of a general lack of empirical evidence.

7. LINC is part of a larger computer firm that has been studied by others and given a number of pseudonyms. In particular, the firm has been referred to as TMR by Jacobsen (1977) and GEM by Dyer (1982).

8. Because targets are new to the organization or new to a position within the organization, they lack the clues necessary to accurately interpret socialization processes. In fact, their views will be biased by their prior experiences both in and out of the organization. Socialization agents are more directly involved in the presentation of "the way things are done" in their organization. Though direct, their involvement may be implicit as well as explicit. Thus the difference between espoused and actual practice.

9. Wheeler (Brim & Wheeler, 1966) notes that a socialization agent may be unaware of his role. Thus, a supervisor at LINC may have an espoused theory -- which is what this research hopes to learn -- as well as more implicit socialization practices which are beyond the scope of this research. Implicit practices would have to be assessed from the socialization targets. Jacobson (1977) has done this for TMR. His results compare favorably with the findings in this paper.

10. "By osmosis" means that a person will pick something up just by virtue of being at LINC and interacting with others who are there -- in the natural course of working. Osmosis does not imply the conscious choice to which Van Maanen & Schein (1979: 46) refer when they comment that informal socialization places "recruits in the position where they must select their own socialization agents."

11. At LINC, an "official mentor" is often assigned to a newcomer. This individual is typically one or more levels above the newcomer and is responsible for guidance, primarily with regard to the technical work. For newcomers to LINC who have work experience, the level of guidance and supervision tends to be lower than for newcomers right out of college.

12. All thirteen supervisors schedule annual salary reviews for their subordinates, and nine of the thirteen schedule semi-annual performance reviews, the frequencies required by LINC. The remaining four supervisors schedule performance reviews at other intervals: every 3 months, 12 months, less than semi-annually, and never.

13. This multi-dimensional pattern may reflect underlying assumptions or themes by which the organization operates (Dyer, personal communication, 1982).

14. As support for selection on the basis of fit, I will recount a personal experience. In the course of my interviews at LINC, five or six of the thirteen supervisors offered me a job at LINC. In all but the last case, I am unsure of the seriousness of the offers. The one supervisor I pushed in this matter said that the offer was genuine. My interpretation of this is that I was perceived as "fitting" at LINC. I know my way around computers, have programmed off and on for many years: I know the jargon of computers and programming. In addition, through my initial background interviews at LINC and through subsequent interviews of supervisors, I learned the 'LINC language.' I appeared to fit, both in terms of the work and also in terms of the organization. Whether the criterion of fit is applied and works in all cases remains an empirical question.

15. LINC's underlying theme of fit may refer to the same notion as Schein's (1968) socialization outcome of creative individualism. LINC's investiture socialization practice can be shown to support an outcome of creative individualism which is in line with the innovative responses of LINC's other socialization practices. Investiture, together with selection for individuality (fit), will result in creative individualism because individuals who are recruited by LINC are then preselected for their agreement with the pivotal norms (fit) and are not then forced to accept the other norms (investiture). In this way, outcomes of rebellion and conformity are ruled out.

16. There may be some "misfits" who, even given the mobility option within LINC, cannot find an appropriate place and will leave LINC. It is assumed that these individuals will be few in number.

17. Dyer's third assumption, that truth is discovered through conflict, is not an issue in this analysis.

BIBLIOGRAPHY

- Becker, Howard S. and James W. Carper. The development of an identification with an occupation. American Journal of Sociology. 1956A, 61, 289-298.
- Becker, Howard S. and James W. Carper. The elements of identification with an occupation. American Sociological Review. 1956B, 21, 341-348.
- Brim, Orville G. Jr and Stanton Wheeler. Socialization after childhood: Two essays. NY: John Wiley & Sons, 1966.
- Dyer, W. Gibb Jr. Culture in organizations: A case study and analysis. MIT working paper: WP 1279-82, February 1982.
- Feldman, Daniel C. A socialization process that helps new recruits succeed. Personnel. March 1980, 57(2), 11-23.
- Holland, John L. Making vocational choices: A theory of careers. Englewood Cliffs, NJ:Prentice Hall, 1973.
- Jacobson, Richard C. The socialization of technically trained college hires in a computer company. MIT: unpublished Master's thesis, 1977.
- Levine, Robert A. Culture, personality, and socialization: An evolutionary view. in David A. Goslin (ed). Handbook of socialization theory and research. Chicago:Rand McNally College Publishing Company, 1969, 503-541.
- Marcson, Simon. The scientist in American industry. NY:Harper & Brothers, 1960.
- Marquis, D. Scientists in a technology-oriented organization—Their expectations, incentives, and career patterns. Paper presented at the Institute on Research Administration, Washington, D.C., 1965 (MIT working paper, #191-66).
- Merton, Robert K. Social theory and social structure. NY:The Free Press, 1957 (second edition), Chapter 10, Patterns of influence: Local and cosmopolitan influentials.
- Miller, G.A. and L.W. Wager. Adult socialization in organizational structure and role orientations. Administrative Science Quarterly. 1971, 16, 151-163.
- Moore, Wilbert E. Occupational socialization. in David A. Goslin (ed). Handbook of socialization theory and research. Chicago:Rand McNally College Publishing Company, 1969, 861-863.



- Rosenbaum, James E. Tournament mobility: career patterns in a corporation. Administrative Science Quarterly. June 1979, 24, 220-241.
- Schein, Edgar H. How to break in the college graduate. Harvard Business Review. Nov/Dec 1964, 68-76.
- Schein, Edgar H. Organizational socialization and the profession of management. Industrial Management Review. 1968, 9(2), 1-16.
- Schein, Edgar H. The individual, the organization, and the career: A conceptual scheme. Journal of Applied Behavioral Science. 1971, 7(4), 401-426.
- Van Maanen, John. Breaking in: Socialization to work. in Robert Dubin (ed). Handbook of work, organization, and society. Chicago: Rand McNally College Publishing Company, 1976, 67-130.
- Van Maanen, John. Experiencing organization: Notes on the meaning of careers and socialization. in John Van Maanen (ed). Organizational careers: Some new perspectives. NY:John Wiley & Sons, 1977, 15-45.
- Van Maanen, John. People processing: Strategies of organizational socialization. Organizational Dynamics. Summer 1978, 19-36.
- Van Maanen, John and Edgar H. Schein. Career development in J.R. Hackman and J.L. Suttle (eds). Improving life at work. Santa Monica, CA:Goodyear Publishing Company, 1977, 30-95.
- Van Maanen, John and Edgar H. Schein. Toward a theory of organizational socialization. in Barry Staw (ed). Research in organizational behavior (vol 1). NY:JAI Press, 1979.

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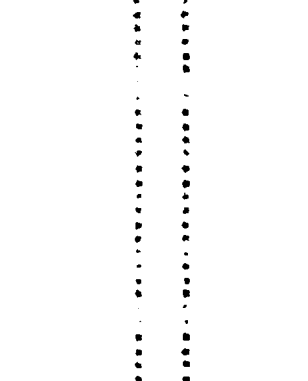
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